

EDUCATION RESEARCH TRAINING GRANTS

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INSTITUTE OF EDUCATION SCIENCES

<http://ies.ed.gov>

NATIONAL CENTER FOR EDUCATION RESEARCH

<http://ncer.ed.gov>

LETTER OF INTENT RECEIPT DATE: May 24, 2007 and September 6, 2007

APPLICATION DEADLINE DATE: July 26, 2007 and November 1, 2007

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1. REQUEST FOR APPLICATIONS

In this announcement, the Institute of Education Sciences (Institute) describes the research training programs that are funded through its National Center for Education Research. Separate announcements are available on the Institute's website that pertain to the research grant programs that are funded through the National Center for Education Research and to the discretionary grant competitions funded through the Institute's National Center for Special Education Research (<http://ies.ed.gov/ncser>).

The Institute invites applications for its Postdoctoral Research Training grant program and its Predoctoral Research Training in the Education Sciences grant program. For the FY 2008 competition, the Institute will consider only applications that meet the requirements outlined below in this Request for Applications.

2. BACKGROUND

A number of recent reports have described current education practice as not resting on a solid research base (Coalition for Evidence-Based Policy, 2002; National Research Council 1999, 2000, 2002). Instead, policy and practice decisions are often guided by personal experience, folk wisdom, and ideology. Grounding education policy and practice in the United States on evidence will require transformation of both the research and practice fields. Practitioners will have to turn routinely to education research when making important decisions, and education researchers will have to produce research that is relevant to those decisions. To achieve this ambitious agenda, there is a need for a cadre of well-trained scientists capable of conducting high quality research that is relevant to practitioners and policy makers.

There are significant capacity issues within the education research community. According to a survey conducted by the National Opinion Research Center, only seven percent of doctorate recipients in the field of Education cite research and development as their primary postdoctoral activity (Hoffer, et al., 2003). Further, there seems to be a mismatch between what education decision-makers want from the education research community and what the education research community is providing. Education leaders are asking for research to help them make informed decisions in those areas in which they have choices to make, such as curriculum and teacher professional development. They want the research and development enterprise to generate valid and useable assessment instruments. They need information on the relative costs and benefits of different education investments.

The Institute has established research priorities that reflect the needs of education decision-makers and practitioners. These priorities are addressed in the Institute's research grant programs, which target key student outcomes and the types of research questions posed by education decision-makers and practitioners.¹ Across the Institute's research programs, the outcomes of interest vary by period of education. In early childhood, the primary outcome of interest is school readiness. From kindergarten through Grade 12, the core academic outcomes of reading, writing, mathematics, and science are the central outcomes of interest, as well as social and behavioral skills that support academic learning in

¹ Descriptions of the Institute's research programs and their goals are available in the Institute's current Education Research Request for Applications available at <http://ies.ed.gov/funding/>.

school. At the postsecondary level, the Institute focuses on improving access to and completion of postsecondary education. Finally, for adults with low levels of education, the Institute supports research to improve the acquisition of basic reading, writing, and mathematics skills.

Many of the questions raised by practitioners and policy makers require answers to questions of what works in education for whom and under what circumstances. These are causal questions that are best answered by research using randomized controlled trials or well-designed quasi-experimental designs. Over the past 30 years, the total number of articles featuring randomized field trials in other areas of social science research has steadily grown, but the number of randomized trials in education has lagged far behind (Boruch, de Moya & Snyder, 2001; Cook, 2001). The use of quantitative methods has become subordinate to the use of qualitative and narrative approaches. The dominance of qualitative methods in research reports in leading education research journals and the dominance of what works questions among practitioners is a clear sign of the mismatch between the focus of the practice community and the current research community. Through its research grant programs, the Institute encourages research that addresses questions of what works, for whom, and under what circumstances by inviting applicants to submit proposals to carry out such projects under the *Efficacy and Replication* goal and the *Scale-Up Evaluations* goal in the Institute's research funding announcements.

Another category of questions raised by the practice community focuses on assessment; the standards and accountability movement has generated a ballooning demand for assessment research. Across its research grant programs, the Institute encourages the development and validation of assessments under the *Measurement and Assessment* goal in the Institute's research funding announcements. Individuals with skills in psychometrics are needed throughout the education sector, from federal statistics agencies to state education agencies, from test developers to local school districts. However, no more than 15 Psychology doctoral degrees in psychometrics have been awarded in a given year since 1992, and a ten year low of two were awarded in 2001 (APA Research Office, 2004). Supply is meager.

Yet another category of problems raised by practitioners and policy makers is the need for a new generation of teaching materials and curricula that take advantage of expanding knowledge of how people learn, and that leverage new delivery mechanisms such as the internet and personal computers (National Research Council, 2000). Across its research grant programs, the Institute supports projects to develop new education interventions (e.g., curricula, instructional approaches, professional development training) under the *Development* goal in the Institute's research grant funding announcements. The design, testing, implementation, and evaluation of new teaching methods will require scientists who are well trained in cognition, learning, and motivation and who are prepared to grapple with the challenges of extending laboratory-derived knowledge to teaching and learning in complex, real-world environments.

The needs of education policy and practice are served not only by research that directly addresses questions of what works but also by research that raises questions and generates hypotheses that can eventually lead to new applications or refinements of existing approaches (National Research Council, 2002). Frequently, hypothesis-generating research relies on complex statistical methods that can tease apart potential causal influences in large datasets. Across our research grant programs, these types of research efforts are supported under the *Identification* goal in the Institute's research grant funding announcements.

Statistical training is also needed in the design and analysis of experimental and quasi-experimental studies, as well as survey and observational data. Although there are many doctoral training programs that focus on statistics, the application of this expertise to problems in education requires that students be grounded in education content. That, in turn, requires a concentration of statistically sophisticated students and faculty who are focused on education topics.

To increase the supply of scientists and researchers in education who are prepared to conduct rigorous evaluation studies, develop and evaluate new products and approaches that are grounded in a science of learning, and design and validate tests and measures, the Institute has established predoctoral and postdoctoral research training programs in the education sciences. The specific intent of these programs is to prepare researchers who are able to prepare competitive proposals that address relevant education topics and meet the methodological requirements specified in the research goals described in the Request for Applications for the Institute's research grant competitions.

3. TOPICS WITH JULY 26, 2007 APPLICATION DEADLINE DATE

A. Postdoctoral Research Training Program in the Education Sciences

Program Officer: Dr. Robin Harwood (202-208-3896; Robin.Harwood@ed.gov).

The Institute's objectives in creating the Postdoctoral Research Training Program in the Education Sciences are to support the training of postdoctoral fellows interested in conducting applied education research and to produce a cadre of education researchers willing and able to conduct a new generation of methodologically rigorous and educationally relevant scientific research that will provide solutions to our nation's most pressing problems and challenges in education. Grants will be awarded to faculty members from disciplines and fields such as economics, education, human development, political science, psychology, sociology, and statistics within qualified institutions of higher education that will provide intensive training in education research and statistics. Postdoctoral students will typically be supported for two or three years, and will be expected to conduct research on education topics.

The Postdoctoral Research Training Program funded by the National Center for Education Research, focuses on training for research in general education (i.e., for typically developing students). Individuals interested in postdoctoral research training fellowships to support special education research should refer to the postdoctoral research training program supported by the Institute's **National Center for Special Education Research** (<http://ies.ed.gov/ncser>).

a. Specific requirements for applications submitted to the Postdoctoral Training Program.

Applicants who intend to revise and resubmit a proposal that was not funded in the Institute's FY 2007 competition must indicate on the application form that their FY 2008 proposal is a revised proposal. Their FY 2007 reviews will be sent to this year's reviewers along with their proposal. Applicants should indicate the revisions that were made to the proposal on the basis of the prior reviews using no more than 3 pages of Appendix A. Please note that the Institute **will not accept applications from current recipients of Postdoctoral Training grants with start dates before the end of their current award** (e.g., if a PI has an FY 2004 Postdoctoral award with an end date of July 30, 2008, a proposal for a new FY 2008 Postdoctoral award must have a start date between August 1, 2008 and September 15, 2008.)

Applications submitted to the Postdoctoral Training program should include the components listed below.

- (i) *Training Director.* A Training Director will be the head of the training fellowship and is expected to be the primary mentor for the fellows' research and training activities. The Training Director will have overall responsibility for the administration of the award and interactions with the Institute.

The Training Director must be the Principal or Co-Principal Investigator on one or more education research projects, currently supported by the Institute or other funding sources, that are appropriate for postdoctoral level research training. Applicants must identify the ongoing grant-supported education research of the Training Director.

- (ii) *Plan for recruiting postdoctoral fellows and eligibility requirements of fellows.* Applicants must include a plan for recruiting postdoctoral fellows, including outreach efforts to encourage applications from members of underrepresented minorities. Training Directors are encouraged to consider recruiting fellowship candidates from disciplines other than their own.

Postdoctoral fellowship candidates must be citizens or permanent residents of the United States. Postdoctoral fellowship candidates must have received their doctorate prior to beginning the fellowship. The Institute must approve postdoctoral fellowship candidates who have received postdoctoral support through other federal training programs before candidates are offered a fellowship. The Institute must approve postdoctoral fellowship candidates who received support through one of the Institute's predoctoral training grant programs. The Institute must approve postdoctoral fellows who have an existing relationship with the Training Director (e.g., dissertation advisor) before candidates are offered a fellowship.

- (iii) *Plan for training postdoctoral fellows.* The Institute's primary focus is on training postdoctoral fellows to **gain the knowledge and skills necessary to conduct the types of research the Institute funds**. Applicants should clearly describe in their training plan how the training relates to research programs of the National Center for Education Research, Institute of Education Sciences. Research programs of the Institute are organized by topic area (e.g., reading and writing, mathematics and science, early childhood education, cognition and student learning) and by research goal (e.g., Identification, Development, Efficacy & Replication, Scale-Up Evaluations, or Measurement).

The applicant must include a plan for training postdoctoral fellows to conduct rigorous education research. Fellows should: (a) gain the breadth of skills and understanding necessary to conduct rigorous applied research in education, and (b) develop the capacity to independently carry out such research, including applying for grant funding and submitting results for publication in peer-reviewed journals.

The length of the postdoctoral fellowship will typically be two to three years.

Applicants should clearly specify the role that the fellows will play in the Training Director's education research projects, and how these and other training activities will produce independent

researchers capable of developing their own education research programs, seeking grant support, and presenting the results of their research in peer-reviewed forums such as professional conferences and journals. **From the Institute's view, a postdoctoral training program would be successful if it produced education researchers who are able to submit competitive applications to the Institute's research competitions.** Applicants should demonstrate their capacity to provide such training by describing their current research projects and the relation of these projects to the Institute's research priorities. Applicants should consider how potential fellows would gain experience and training in the design and implementation of rigorous education research methods and statistical analyses. As appropriate, fellows may audit courses and engage in other training activities that enhance their knowledge and professional skills (e.g., auditing courses in areas not covered in their doctoral training, receiving training in the administration and scoring of assessment measures).

Fellows' research and training activities must address practical questions in education. It is anticipated that fellows will submit findings from their postdoctoral research activities to peer reviewed forums such as professional conferences and journals. Fellows will attend and present at professional conferences. Fellows are encouraged to work with the Training Director to seek independent grant support for their own research from the Institute or other sources.

- (iv) *Stipend support, travel, and additional costs.* The stipend amount for each fellow is \$50,000 per year (12 months) for up to 3 years. Fellows must make satisfactory progress in their research activities in order to remain eligible for fellowship funds. The fellowship must include fringe benefits (e.g., health insurance and normal fees) at the level afforded to other employees of the applicant institution who are at a similar level and class as the postdoctoral fellows, with the Institute's contribution not to exceed \$10,500 per year per fellow. There are no funds for tuition costs; fellows are expected to audit any courses that are part of their training. Thus the total stipend plus fringe benefits per fellow per year to be supported through Institute funds is \$60,500.

Funds should be requested to support both Training Director and fellows' travel for one two-day meeting each year in Washington, DC. Funds may be requested up to \$12,000 per year per fellow to defray the costs of recruiting fellows (e.g., advertisements, travel of applicants necessary for interviews), costs of research by fellows (local travel to research sites, materials, personal computer), and fellow registration and travel expenses to attend professional conferences. Applicants should note that there are no funds for faculty research or salaries through this program. Funds for facility renovation and maintenance are not allowed.

Applicants may request funds to take advantage of training opportunities and resources available through other entities (e.g., methodological or specialized statistical training institutes) that complement the training the postdoctoral fellows receive at the applicant's institution.

- (v) *Awards.* The maximum length of the grant is 4 years. Applicants may request funds for up to 4 fellows. The amount of the award will depend on the number of fellows to be supported on stipends and the length of the fellowships (i.e., 2 or 3 years). The Institute anticipates making awards of approximately \$160,000 per year for 4 years. In no case should a request exceed \$200,000 per year. The amounts above assume that four fellows will be supported for 2 years

each, but applicants are free to request support for fewer fellows to be supported for 2 or 3 years each.

4. TOPICS WITH NOVEMBER 1, 2007 APPLICATION DEADLINE DATE

A. Predoctoral Research Training Grant Program

Program Officer: Dr. Robin Harwood (202-208-3896; Robin.Harwood@ed.gov)

To increase the supply of scientists and researchers in education who are prepared to conduct rigorous evaluation studies, develop and evaluate new products and approaches that are grounded in a science of learning, design and validate tests and measures, and address applied education research problems utilizing sophisticated statistical methods to analyze data, the Institute will fund interdisciplinary graduate research training programs in the education sciences. **The Institute's primary purpose for this program is to train graduate students to conduct the type of research that the Institute funds.**

Grants will be awarded to institutions of higher education that can create cohesive graduate programs in which predoctoral students will graduate within a traditional discipline (e.g., economics) but will receive a certificate in education sciences. Predoctoral students will be expected to conduct dissertations on education topics. The proposed graduate programs should be interdisciplinary and may involve a number of academic disciplines (e.g., psychology, political science, economics, statistics, education, public health, sociology). The lead department or Program Director's department does not need to be in education. However, the proposed interdisciplinary program must focus on training students to conduct applied research in education.

For the FY 2008 Predoctoral Research Training program, applicants must under either Goal One or Goal Two. Under [Goal One](#), applicants who do *not* currently have a predoctoral training program funded by the Institute are welcome to apply. Under [Goal Two](#), applicants who currently have a predoctoral training program that began in FY 2004 are welcome to apply.

a. Specific requirements for applications submitted to Goal One of the Predoctoral Training Program.

Under the Predoctoral Research Training topic, the requirements for applications under **Goal One** are described the below. The proposed training program should include the following features:

- (i) *Program Director.* A Program Director will be the head of the training program and is expected to be an essential participant in its educational and research activities. The Program Director will have overall responsibility for the administration of the award, management of the program, and interactions with the Institute.
- (ii) *Core faculty.* Strong applications will have a core of five or more outstanding faculty (including the Program Director) with proven track records in research and training in education-related topics. Strong applications will include faculty who have demonstrated their ability to conduct research projects of the type that the Institute funds through the research grant programs of the National Center for Education Research and the National Center for Special Education Research. A summary table of the research projects that have recently been completed or are currently

being conducted by core faculty should be included in a table in Appendix A. This table should specify both the research topic and methods used for each project described. The table should also identify how these projects fit with the Institute's research programs and goals. Strong applications will provide evidence that the identified core faculty are committed to developing and sustaining the proposed graduate certificate program in the education sciences, and are able to prepare students to conduct the type of research that the Institute funds.

- (iii) *Coordinated curriculum.* Applicants must clearly describe the proposed education sciences training program. Applicants under Goal One must make explicit the ways in which the proposed program is different from what is currently being offered.
 - (a) Applicants must identify **one or more content emphases** that reflect the Institute's research topic priorities (e.g., school readiness, mathematics, reading, education leadership, education policy) for the proposed program.
 - (b) Applicants must identify **one or more methodological emphases** for the program that will prepare students to conduct the type of research that the Institute funds (e.g., research goals). For example, a proposed program might focus on training students to be proficient in the design and implementation of, and analysis of data from, cluster randomized trials. Alternatively, a program might focus on the design and validation of assessments, with methodological emphasis on techniques such as item response theory, principal components analysis, and exploratory and confirmatory factor analysis.
- (iv) *Plan for coordinating across academic units.* The coordinated curriculum will likely involve a number of academic departments and include courses offered by faculty from multiple disciplines. The Institute recognizes that developing and sustaining curriculum programs across academic units is not easy. Proseminars or special colloquia are typically not sufficient by themselves to produce strong collaborations among individual faculty and across academic units. Strong applications will include both strategies to support the interdisciplinary nature of the program (e.g., faculty research collaborations that cut across disciplines, team-teaching courses) and a documented *a priori* history of interdisciplinary collaboration.
- (v) *Additional requirements for fellows.* Fellows' doctoral dissertations and other required products must address practical questions in education. Dissertation committees must include at least two faculty members who are part of the research training program.
- (vi) *Plan for recruiting, mentoring, and retaining strong graduate students.* Applicants must include an institutional plan for the recruitment, mentoring, and retention of a full-time complement of at least 10 graduate fellows, who must meet the requirements outlined in subsection vii. Applicants should discuss plans for outreach efforts to encourage applications from members of under-represented minorities.
- (vii) *Provision of fellowship stipend support for all fellows who are admitted into the program.* The default stipend amount is \$30,000 per year (12 months) per fellow for up to 5 years. Applicants may propose other arrangements with justification (e.g., campus policies on levels of student stipends). All fellowship stipend recipients must be citizens or permanent residents of the United

States. In addition, fellowship recipients must be registered as full-time students during each term for which they will be receiving fellowship support. Fellows must make satisfactory progress towards the degree in order to remain eligible for program funds. The fellowship also will provide a cost-of-education allowance of up to \$10,500 per year per fellow for tuition, health insurance, and normal fees.

- (viii) *Additional funds for fellows.* Funds must be requested for the Program Director and fellows to travel for one two-day meeting each year in Washington, DC. Funds also may be requested to support fellow registration and travel expenses to attend professional conferences. Funds may be requested up to \$25,000 per year to partially defray the routine costs of research by fellows (e.g., local travel to research sites, materials). Requests for grant supplements to support more extensive research projects by individual or collaborating fellows will be considered. Proposals requesting such supplements may be submitted to the Institute at any time during the award period.
- (ix) *Funds available to support faculty and the program in general.* There are no funds for faculty research or salaries with the following exceptions: (a) up to 5 months total of faculty salary support for the development of new program curricula; (b) up to two months of salary support per year for the Program Director for management purposes; (c) up to half the salary of a new faculty member who would be recruited specifically to enhance the breadth and quality of the proposed research training program; and (d) funds to support short-term visiting faculty who will enhance the breadth and quality of the research training program. Funds may be requested to support colloquia as part of the training program, including but not limited to travel support for guest research and training presentations. Funds may be requested for fellows to take advantage of appropriate training opportunities offered at other institutions. Applicants may request up to six months of salary support per year for a Program Coordinator for logistical and clerical program support. Funds for facility renovation and maintenance are *not* allowed.
- (x) *Institutional commitment.* Strong applications will include evidence of institutional commitment(s) to furthering the goals of the training program and creating a supportive environment for research and education at the level of the participating departments and at the levels of the participating colleges and the university.
- (xi) *Awards.* Awards will be made in amounts ranging from \$500,000 to \$1,000,000 (total cost) per year for a duration of five years. The amount of the award will depend on the scope of the program and the number of fellows to be supported on stipends.

b. *Specific requirements for applications submitted to Goal Two of the Predoctoral Training Program.*

Applicants who currently have an Institute of Education Sciences' Predoctoral Training Program that was awarded in FY 2004 and intend to apply for additional support under **Goal Two**, must include all the information specified above in sections A.a.(i) to A.a.(x). **In addition, Goal Two applicants must include:**

- (xi) *Evidence of accomplishments of current predoctoral students.* Current recipients of the Institute's predoctoral training programs should provide evidence that their current students have or are developing the knowledge and skills that will enable them to prepare competitive grant proposals and/or carry out research projects that reflect the Institute's content and methodological foci. A summary table of the research projects that have been completed or are currently being conducted by predoctoral students who received support under the applicant's FY 2004 predoctoral training program award should be included in a table in Appendix A. This table should specify both the research topic and methods used for each project described. The table should also identify which Institute research program and goal the project could have been submitted under.
- (xii) *Evidence supporting request for specific number of predoctoral students.* Proposals for new awards from current predoctoral training grant recipients must include a justification for the number of students to be supported with potential FY 2008 funding in light of the number of students currently being supported. As part of the justification, the applicant should compare the number of fellows for whom support was requested in the original FY 2004 award with the actual number of predoctoral fellows trained with support from the current predoctoral training award.
- (xiii) *Discussion of challenges confronted during the current funding period and plans to address and overcome these challenges.* Creating successful interdisciplinary predoctoral training programs is challenging. Current recipients of the Institute's predoctoral training programs should provide a discussion of the challenges confronted during the current funding program that have impacted their ability to accomplish to purpose of their program (i.e., to train graduate students to conduct the type of research that the Institute funds). Applicants should discuss how these challenges were overcome in the current grant period, and their plans for overcoming and addressing such challenges in future years.
- (xv) *Awards.* Awards will be made in amounts ranging from \$500,000 to \$1,000,000 (total cost) per year for a duration of five years. The amount of the award will depend on the scope of the program and the number of fellows to be supported on stipends.

5. APPLICATIONS AVAILABLE

Application forms and instructions for the electronic submission of applications will be available for the programs of research listed in this RFA from the following web site:

<http://www.Grants.gov>

by the following dates:

July 26, 2007 Application Deadline Date
November 1, 2007 Application Deadline Date

April 23, 2007
April 30, 2007

The application form approved for use in the competitions specified in this RFA is the government-wide SF424 Research and Related (R&R) Form (OMB Number 4040-0001).

6. MECHANISMS OF SUPPORT

The Institute intends to award grants under the Education Research Training programs pursuant to this request for applications. The maximum length of the award period is five years.

7. FUNDING AVAILABLE

For the [Postdoctoral Training Program](#), awards will typically be about \$160,000 (total cost = direct + indirect cost) per year for 4 years. In no case should a request exceed \$200,000 (total cost) per year.

For the [Predoctoral Training Program](#), awards will be made in amounts ranging from \$500,000 to \$1,000,000 (total cost = direct + indirect cost) per year for a duration of five years. The amount of the award will depend on the scope of the program and the number of fellows to be supported on stipends.

Although the plans of the Institute include these training programs, awards pursuant to this request for applications are contingent upon the availability of funds and the receipt of a sufficient number of meritorious applications. The number of programs funded depends upon the number of high quality applications submitted.

8. ELIGIBLE APPLICANTS

For the Education Research Training Programs (both Postdoctoral and Predoctoral), eligible applicants are academic institutions in the United States and its territories that grant doctoral degrees in fields relevant to education. The proposed Directors of these training programs must be the Principal or Co-Principal Investigator on one or more education research grants currently supported by the Institute or other funding source.

9. SPECIAL REQUIREMENTS

Education Training grant recipients who have not successfully recruited the number of fellows for whom they requested funding will have their continuation funding adjusted as a result.

Research associated with this training fellowship must be relevant to U.S. education. Fellowship recipients are expected to publish or otherwise make publicly available the results of the work supported through this training fellowship.

Postdoctoral and predoctoral fellowship recipients and Directors of the Postdoctoral and Predoctoral Training Programs must attend one two-day meeting each year in Washington, DC, with other grantees and Institute staff.

U.S. Department of Education policy (34 CFR 75.562 (c)(2)) limits indirect cost reimbursement on a training grant to the recipient's actual indirect costs, as determined by its negotiated indirect cost rate agreement, or eight percent of a modified total direct cost base, whichever amount is less. For the purposes of this competition, a modified total direct cost base is defined as total direct costs less stipends, tuition and related fees, and capital expenditures of \$5,000 or more.

10. LETTER OF INTENT

A letter indicating a potential applicant's intent to submit an application is optional, but encouraged, for each application. The letter of intent form must be submitted electronically by the date listed at the beginning of this document, using the instructions provided at: <https://ies.constellagroup.com>.

For the Postdoctoral Research Training Program, the letter of intent should include: (a) a descriptive title; (b) a brief description of the current research projects that the fellows would be part of (about 3,500 characters including spaces, which is approximately one page, single-spaced); and (c) the name, institutional affiliation, address, telephone number and e-mail address of the Training Director. The letter of intent should indicate the duration of the proposed project and provide an estimated budget request by year, and a total budget request.

For the Predoctoral Research Training Program, the letter of intent should include: (a) a descriptive title; (b) a brief description of the proposed program (about 3500 characters including spaces, which is approximately one page, single-spaced); (c) the name, institutional affiliation, address, telephone number, and e-mail address of the Program Director; and (d) the names of all core faculty to the training program. The letter of intent should indicate the duration of the proposed project and provide an estimated budget request by year, and a total budget request.

Although the letter of intent is optional, is not binding, and does not enter into the review of subsequent applications, the information that it contains allows Institute staff to estimate the potential workload to plan the review.

11. SUBMITTING AN APPLICATION

Applications must be submitted **electronically by 4:30 p.m. Washington, DC time** on the application deadline date, using the standard forms and the instructions provided at the following web site:

<http://www.Grants.gov>

Potential applicants should check this site for information about the electronic submission procedures that must be followed and the software that will be required.

12. CONTENTS OF APPLICATION

All applications and proposals for Institute funding must be contained within specified page limits. Internet Web site addresses (URLs) may not be used to provide information necessary to the review because reviewers are under no obligation to view the Internet sites.

All of the instructions and requirements regarding (a) submission of the application, (b) application page limits, (c) acceptable format, and (d) necessary attachments (.PDF files) will be provided in the **Application Instructions** document for this competition to be found under the “For Applicants -- Apply for Grants” link of Grants.gov. Also, all of the required forms will be provided in the **Application Package** that accompanies the Application Instructions.

You must search for the downloadable Application Instructions and Application Package for each competition by the CFDA number. Do not include the alpha suffix in your search (e.g., search for 84.305, not 84.305B). For this competition, make sure that you download the “Education Research Training” Application Instructions and Application Package.

In this section, the Institute provides instructions for applications to the Education Research Training Programs regarding the content of the (i) project summary/abstract, (ii) project narrative, (iii) bibliography and references cited, (iv) biographical sketches of key project personnel, (v) narrative budget justification, (vi) subaward budgets, (vii) Appendix A, and (viii) additional forms, including Protection of Human Research Subjects, if applicable.

A. Postdoctoral Research Training Grant Program

- a. ***Project summary/abstract.*** For Postdoctoral Research Training applications, the project summary/abstract will be submitted as a .PDF attachment, is limited to 1 single-spaced page, and must adhere to the margin, format, and font size requirements described in the project narrative section.

The project summary/abstract should include (1) The title of the research training fellowship; (2) name and institutional affiliation of the Training Director; (3) number of fellows to be recruited and length of fellowship; (4) brief description of education research currently conducted by the proposed Training Director and opportunities for fellows to be involved in education research; and (5) brief description of the proposed training fellowship, highlighting its key research and educational features.

- b. ***Training program narrative.*** The project narrative will be submitted as a .PDF attachment. Incorporating the requirements outlined under [Section 3.A.a](#) (Specific requirements for applications submitted to the Postdoctoral Training Program), the *training program narrative* provides the majority of the information on which reviewers will evaluate the proposal and should include the following sections (i through iv) in the order listed below.

The postdoctoral training narrative is limited to **15 single-spaced pages**. This 15-page limit does not include any of the SF 424 forms, the one-page summary/abstract, the appendices, research on human

subjects information, bibliography and references cited, biographical sketches of senior/key personnel, narrative budget justification, sub award budget information or certifications and assurances. **Reviewers are able to conduct the highest quality review when applications are concise and easy to read, with pages numbered consecutively.**

For the purposes of applications submitted under this RFA, a “page” is 8.5 in. x 11 in., on one side only, with 1 inch margins at the top, bottom, and both sides. Text must be single spaced in the narrative. To ensure that the text is easy for reviewers to read and that all applicants have the same amount of available space in which to describe their projects, applicants must adhere to the type size and format specifications for the entire narrative including footnotes. **It is very important that applicants review carefully the “Application Format Requirements” outlined in *Fiscal Year 2008 Application Package Highlights***, which will be part of the application instructions, available on <http://www.Grants.gov> by April 23, 2007.

- (i) *Significance.* Applicants should describe the overall goals and anticipated impact of the proposed postdoctoral research training fellowship on preparing junior scholars to gain the knowledge and skills necessary to conduct the types of research the Institute funds. Applicants should discuss potential career development opportunities to be provided to fellowship recipients.
- (ii) *Fellowship Plan.* Applicants must discuss how the proposed training fellowship will address the issues raised in this request for applications (e.g., describe ongoing lines of education research being conducted by the proposed Training Director and how fellows will play an active role in these research activities). Applicants should clearly describe how the training plan relates to research programs of the Institute of Education Sciences, both in terms of topical focus and methodological training opportunities. Applicants should list concrete strategies for advertising the training fellowship and recruiting fellows and the approximate number of fellows to be admitted to the training fellowship. Applicants should address how recruitment procedures will encourage the participation of underrepresented minorities.
- (iii) *Personnel.* Applicants should describe the qualifications of key personnel, including the Training Director, specifying their proposed role in the training fellowship (information on personnel should also be provided in their curriculum vitae) and elaborating how the key personnel’s research expertise reflect the content and methodological foci of the Institute.

Applicants should include information on previous postdoctoral fellows who have been trained and/or supported by the Training Director and other faculty who will be mentoring the potential postdoctoral fellows (e.g., number of postdoctoral fellows in past 5 years, average length of the fellowship, current positions of previous fellows). Information on previous postdoctoral fellows may be listed in tabular format in Appendix A.

If specific individuals have been identified to whom fellowships would be offered their curriculum vitae should be included in the application.

- (iv) *Resources.* Applicants should provide a description of the resources available to support the training fellowship at the participating institution, including field settings (e.g., schools,

software development labs) with which the Training Director has a relationship that could support fellows' research projects.

- c. ***Bibliography and references cited.*** This section will be submitted as a .PDF attachment. Please include complete citations, including titles and all authors, for literature cited in the research narrative.
- d. ***Biographical sketches of senior/key personnel.*** This section will be submitted as a .PDF attachment. Abbreviated curriculum vitae should be provided for the principal investigator(s) and other key personnel. *Each vita is limited to 4 pages and should include information sufficient to demonstrate that personnel possess training and expertise commensurate with their duties (e.g., publications, grants, relevant research experience) and have adequate time devoted to the project to carry out their duties (e.g., list current and pending grants with the proportion of the individual's time allocated to each project).* The curriculum vita must adhere to the margin, format, and font size requirements described in the project narrative section.
- e. ***Narrative budget justification.*** This section will be submitted as a .PDF attachment and should provide sufficient detail to allow reviewers to judge whether reasonable costs have been attributed to the project. The budget justification should correspond to the itemized breakdown of project costs that is provided in the Research & Related Budget (SF 424) Sections A & B; C, D, & E; and F-K. It should include the time commitments and brief descriptions of the responsibilities of key personnel. A justification for equipment purchase, supplies, travel and other related project costs should also be provided in the budget narrative for each project year outlined in the Research & Related Budget (SF 424).

For those applications that include a subaward(s) for work conducted at collaborating institutions, the narrative should also provide the details about the subaward(s). Include the actual subaward budgets as a separate attachment. (See below "Subaward Budget".)

U.S. Department of Education policy (34 CFR 75.562 (c)(2)) limits indirect cost reimbursement on a training grant to the recipient's actual indirect costs, as determined by its negotiated indirect cost rate agreement, or eight percent of a modified total direct cost base, whichever amount is less. For the purposes of this competition, a modified total direct cost base is defined as total direct costs less stipends, tuition and related fees, and capital expenditures of \$5,000 or more.

- f. ***Subaward Budget.*** This section will be submitted as a .PDF attachment. For applications that include a subaward(s) for work conducted at collaborating institutions, applicants must submit an itemized budget spreadsheet for each subaward for each project year. As noted above, the details of the subaward costs should be included in the Narrative Budget Justification. An Excel spreadsheet will be provided in the electronic Application Instructions document to allow applicants to enter the subaward budget information in accordance with the prescribed format. Applicants will complete the spreadsheet in Excel format, convert it to a .PDF file, and then upload it as an attachment.
- g. ***Appendix A.*** At the end of the Project Narrative, applicants must include Appendix A and submit it as part of the same .PDF attachment.

In *Appendix A*, the applicant must provide a support letter from the participating institution. The letter should include enough information to make it clear that the author of the letter understands the nature of the commitment of time, space, and resources to the training fellowship that will be required if the application is funded. Applicants also may include any additional figures, charts, or tables that supplement the training fellowship narrative in this section. For example, applicants might provide a table listing the projects that potential fellows could work on. Appendix A is limited to 10 pages. In addition, in the case of a resubmission, the applicant may use **up to 3 pages** of the appendix to describe the ways in which the revised proposal is responsive to prior reviewer feedback. These are the only materials that may be included in Appendix A; all other materials will be removed prior to review of the application. Narrative text related to any aspect of the project must be included in the research or postdoctoral training narrative.

B. Predoctoral Research Training Grant Program

- a. ***Project summary/abstract.*** For Predoctoral Research Training in the Education Sciences applications, the project summary/abstract will be submitted as a .PDF attachment, is limited to 1 single-spaced page, and must adhere to the margin, format, and font size requirements described in the project narrative section. The project summary/abstract should include: (1) The title of the research training program; (2) name and institutional affiliation of the Program Director and identified core faculty; and (3) a brief description of the proposed training program.
- b. ***Training program narrative.*** The training program narrative will be submitted as a .PDF attachment. Incorporating the requirements outlined under [Section 4.A.a](#) for Goal 1 proposals and [Section 4.A.b](#) for Goal 2 proposals, the *training program narrative* provides the majority of the information on which reviewers will evaluate the proposal and should include the following sections (i through iv) in the order listed below.

The predoctoral training narrative is limited to **25 single-spaced pages**. This 25-page limit does not include any of the SF 424 forms, the one-page summary/abstract, the appendices, bibliography and references cited, biographical sketches of senior/key personnel, narrative budget justification, sub award budget information or certifications and assurances. **Reviewers are able to conduct the highest quality review when applications are concise and easy to read, with pages numbered consecutively.**

For the purposes of applications submitted under this RFA, a “page” is 8.5 in. x 11 in., on one side only, with 1 inch margins at the top, bottom, and both sides. Text must be single spaced in the narrative. To ensure that the text is easy for reviewers to read and that all applicants have the same amount of available space in which to describe their projects, applicants must adhere to the type size and format specifications for the entire narrative including footnotes. **It is very important that applicants review carefully the “Application Format Requirements” outlined in *Fiscal Year 2008 Application Package Highlights***, which will be part of the application instructions, available on <http://www.Grants.gov> by April 30, 2007.

- (i) ***Significance.*** Applicants should clearly address how the proposed program will prepare students to conduct the type of research that the Institute funds. Applicants should identify

how the predoctoral training program will address the Institute' research priorities as described in the Background section of this Request for Applications. Goal One applicants should clearly articulate how the proposed training program is distinct from what currently exists at the institution.

- (ii) *Training program plan.* Describe the coordinated curriculum, including the methodological and content emphases and how these emphases support the Institute's research priorities described in the [Background](#) section and the Institute's Research Requests for Applications. Whatever content emphasis/emphases are chosen, applicants should describe (1) how the content emphases relate to the Institute's research topics, (2) the expertise of faculty who will provide leadership and instruction in this area, and (3) how the content emphases will be integrated into students' curriculum and research projects. Whatever methodological emphasis/emphases are chosen, applicants should describe (1) how the methodological emphasis relates to the Institute's research programs, (2) the expertise of faculty who will provide leadership and instruction in this area, and (3) how the methodological emphasis will be integrated into students' curriculum and research projects.

Describe how the coordinated curriculum will be enacted (e.g., courses, projects, seminars, research practicum). Describe plans for integrating or coordinating the curriculum and requirements of the proposed certificate program with the curriculum and requirements in the academic units participating in the proposed program. For example, how will students meet the academic requirements of their home departments as well as those of the training program in a timely fashion? Discuss any disciplinary or institutional barriers to the creation and maintenance of the proposed training program in the education sciences and how the proposed program will address these issues. Describe the graduate education and training mechanisms that are essential to the proposed program.

Outline ongoing lines of education research being conducted by the proposed faculty and how research practicum and other training activities will be incorporated into the training program.

Describe the commitment of the institution at all appropriate administrative levels to supporting the goals of the proposed training program and to creating a supportive environment for interdisciplinary education research. Applicants should describe the recruitment and retention of graduate students at the institution over the last three years, including information (e.g., demographics, average GRE scores) for applicants and enrollees, and the number of doctorates awarded, including average time to degree. This information may be listed in tabular format in Appendix A.

Discuss strategies for advertising and recruiting fellows and the approximate number of fellows to be admitted to the program. Address how recruitment procedures will encourage the participation of underrepresented minorities.

A supporting letter of commitment from the senior administration must be included in Appendix A. Describe plans and procedures for the overall management of the program. These plans should include clear and fair procedures for the allocation of program funds,

including the amount and duration of fellowship support, management of day-to-day operations, and so forth. Describe plans for assessing the overall impact of the training program (include a list of measures to be collected and analyzed on a year-to-year basis).

- (iii) *Personnel.* Include brief descriptions of the qualifications of key personnel, including the Program Director and four or more other key faculty members, specifying their proposed role in the training program (information on personnel should also be provided in their curriculum vitae).
 - (iv) *Resources.* Provide a description of the resources available to support the training program at the participating institution, including field settings (e.g., schools, software development labs) with which the institution has a relationships that could support fellows- training and research projects.
- c. ***Bibliography and references cited.*** This section will be submitted as a .PDF attachment. Please include complete citations, including titles and all authors, for literature cited in the research narrative.
- d. ***Biographical sketches of senior/key personnel.*** This section will be submitted as a .PDF attachment. Abbreviated curriculum vitae should be provided for the principal investigator(s) and other key personnel. *Each vita is limited to 4 pages and should include sufficient information to demonstrate that personnel possess training and expertise commensurate with their duties.* The vita should include current Federal award support, including other training grants. The curriculum vita must adhere to the margin, format, and font size requirements described in the project narrative section.
- e. ***Narrative budget justification.*** This section will be submitted as a .PDF attachment and should provide sufficient detail to allow reviewers to judge whether reasonable costs have been attributed to the project. The budget justification should correspond to the itemized breakdown of project costs that is provided in the Research & Related Budget (SF 424) Sections A & B; C, D, &E; and F-K. It should include the time commitments and brief descriptions of the responsibilities of key personnel. A justification for equipment purchase, supplies, travel and other related project costs should also be provided in the budget narrative for each project year outlined in the Research & Related Budget (SF 424).

Goal Two proposals must clearly demonstrate how the budgets from the FY 2004 and FY 2008 proposals are distinct and non-overlapping. That is, the budget justification should make clear which current and future project costs are charged to the FY 2004 award and which are charged to the FY 2008 award. For example, the applicant should identify which predoctoral students will continue to be supported by the FY 2004 award and which predoctoral students would be supported by an FY 2008 award.

For those applications that include a subaward(s) for work conducted at collaborating institutions, the narrative should also provide the details about the subaward(s). Include the actual subaward budgets as a separate attachment. (See below “Subaward Budget”.)

U.S. Department of Education policy (34 CFR 75.562 (c)(2)) limits indirect cost reimbursement on a training grant to the recipient's actual indirect costs, as determined by its negotiated indirect cost rate agreement, or eight percent of a modified total direct cost base, whichever amount is less. For the purposes of this competition, a modified total direct cost base is defined as total direct costs less stipends, tuition and related fees, and capital expenditures of \$5,000 or more.

- f. ***Subaward Budget.*** This section will be submitted as a .PDF attachment. For applications that include a subaward(s) for work conducted at collaborating institutions, applicants must submit an itemized budget spreadsheet for each subaward for each project year. As noted above, the details of the subaward costs should be included in the Narrative Budget Justification. An Excel spreadsheet will be provided in the electronic Application Instructions document to allow applicants to enter the subaward budget information in accordance with the prescribed format. Applicants will complete the spreadsheet in Excel format, convert it to a .PDF file, and then upload it as an attachment.
- g. ***Appendix A.*** At the end of the Project Narrative, applicants must include Appendix A and submit it as part of the same .PDF attachment.

In *Appendix A*, the applicant must provide a support letter from the participating institution. The letter should include enough information to make it clear that the author of the letter understands the nature of the commitment of time, space, and resources to the training fellowship that will be required if the application is funded. The applicant must also include a table summarizing the research topics and methodological expertise of identified core faculty. [Goal Two](#) applicants must include a table in Appendix A summarizing the research topics and methodological foci of ongoing and completed research projects of current predoctoral fellows. Applicants also may include any additional figures, charts, or tables that supplement the training fellowship narrative in this section. For example, applicants might provide a table listing the projects that potential fellows could work on. Appendix A is limited to 10 pages. These are the only materials that may be included in Appendix A; all other materials will be removed prior to review of the application. Narrative text related to any aspect of the project must be included in the research or postdoctoral training narrative.

13. ADDITIONAL FORMS

Please note that applicants selected for funding will be required to submit the following certifications and assurances before a grant is issued:

- A. SF 424B-Assurances-Non-Construction Programs
- B. Grants.gov Lobbying Form
- C. ED 80-0014 (if applicable)-Lower Tier Certification
- D. SF-LLL (if applicable) - Disclosure of Lobbying Activities
- E. Protection of Human Research Subjects assurance and/or Institutional Review Board certification, as appropriate

14. APPLICATION PROCESSING

Applications must be received by **4:30 p.m. Washington, DC time** on the application transmittal deadline listed in the heading of this request for applications. Upon receipt, each application will be reviewed for compliance and for responsiveness to this request for applications. Applications that do not address specific requirements of this request will be returned to the applicants without further consideration.

15. PEER REVIEW PROCESS

Applications that are compliant and responsive to this request will be evaluated for scientific and technical merit. Reviews will be conducted in accordance with the review criteria stated below by a panel of scientists who have substantive and methodological expertise appropriate to the research training program and request for applications.

Each application will be assigned to one of the Institute's scientific review panels. At least two primary reviewers will complete written evaluations of the application, identifying strengths and weaknesses related to each of the review criteria. Primary reviewers will independently assign a score for each criterion, as well as an overall score, for each application they review. Based on the overall scores assigned by primary reviewers, an average overall score for each application will be calculated and a preliminary rank order of applications prepared before the full review panel convenes to complete the review of applications.

The full panel will consider and score only those applications deemed to be the most competitive and to have the highest merit, as reflected by the preliminary rank order. A panel member may nominate for consideration by the full panel any proposal that he or she believes merits full panel review but would not have been included in the full panel meeting based on its preliminary rank order.

16. REVIEW CRITERIA FOR SCIENTIFIC MERIT

The goal of Institute-supported programs is to contribute to the solution of education problems and to provide reliable information about the education practices that support learning and improve academic achievement and access to education for all students. Reviewers will be expected to assess the following aspects of an application in order to judge the likelihood that the proposed research training fellowship will have a substantial impact on the pursuit of that goal. Information pertinent to each of these criteria is also described above in the section on Requirements of the Proposed Training Fellowship ([Section 3.A.a](#) for Postdoctoral Training Program; [Section 4.A.a](#) and [Section 4.A.b](#) for Predoctoral Training Program) and in the description of the training program narrative ([Section 12.A.b](#) for Postdoctoral Training Program; [Section 12.B.b](#) for Predoctoral Training Program).

A. Postdoctoral Research Training Grant Program Review Criteria

- a. **Significance.** Does the applicant make a compelling case for the potential contribution of the proposed postdoctoral research training program for training researchers to conduct the types of research that are funded by the Institute of Education Sciences? Are the Training Director's research projects likely to advance the scholarly development of the participating fellows?
- b. **Fellowship plan.** Does the applicant present (a) a strong plan for the proposed research training fellowship, including the role that fellows will play in ongoing research projects; (b) a clear orientation that emphasizes rigorous training in research methodology and statistics; and (c) an emphasis on research that addresses practical problems in education? Does the proposed plan meet the requirements described in the section on the Postdoctoral Research Training Program in the Education Sciences ([Section 3.A](#)) and in the description of the training program narrative (in [Section 12.A.b](#))?
- c. **Personnel.** Does the description of the personnel make it apparent that the Training Director and other faculty possess the training and experience and will commit sufficient time to competently implement the proposed training fellowship?
- d. **Resources.** Does the applicant have the facilities, equipment, supplies, and other resources required to support the proposed training activities?

B. Predoctoral Research Training Grant Program Review Criteria

- a. **Significance.** Does the applicant make a compelling case for the potential contribution of the proposed research training fellowship for training researchers to conduct the types of research that are funded by the Institute of Education Sciences?
- b. **Training program plan.** Does the applicant present (a) a strong plan for the proposed research training program, including a methodological emphasis and content emphasis that are likely to prepare students to conduct the type of research that the Institute funds; (b) a clear orientation that emphasizes rigorous training in research methodology and statistics; and (c) an emphasis on research that addresses practical problems in education? Does the proposed plan meet the requirements described in the section on the Predoctoral Research Training Grant Program ([Section 4.A](#)) and in the description of the training program narrative (in [Section 12.B.b](#))?
- c. **Personnel.** Does the description of the personnel make it apparent that the Training Director and other faculty possess the training and experience and will commit sufficient time to competently implement the proposed training fellowship?
- d. **Resources.** Does the applicant have the facilities, equipment, supplies, and other resources required to support the proposed training activities?

17. RECEIPT AND START DATE SCHEDULE

A. Letter of Intent Receipt Dates:

July 26, 2007 Application Deadline Date
November 1, 2007 Application Deadline Date

May 24, 2007
September 6, 2007

B. Application Deadline Date:

July 26, 2007 Application Deadline Date
November 1, 2007 Application Deadline Date

July 26, 2007
November 1, 2007

C. Earliest Anticipated Start Date:

July 26, 2007 Application Deadline Date
November 1, 2007 Application Deadline Date

March 2008
July 2008

18. AWARD DECISIONS

The following will be considered in making award decisions:

- Overall strength of the proposed training program as determined by the peer review process
- Responsiveness to the requirements of this request
- Performance and use of funds under a previous Federal award
- Contribution to the overall goals described in this request
- Availability of funds

19. INQUIRIES MAY BE SENT TO:

Dr. Robin Harwood
Institute of Education Sciences
555 New Jersey Avenue, NW
Washington, DC 20208

Email: Robin.Harwood@ed.gov
Telephone: (202) 208-3896

20. PROGRAM AUTHORITY

20 U.S.C. 9501 *et seq.*, the “Education Sciences Reform Act of 2002,” Title I of Public Law 107-279, November 5, 2002. This program is not subject to the intergovernmental review requirements of Executive Order 12372.

21. APPLICABLE REGULATIONS

The Education Department General Administrative Regulations (EDGAR) in 34 CFR parts 74, 77, 80, 81, 82, 84, 85, 86 (part 86 applies only to institutions of higher education), 97, 98, and 99. In addition 34 CFR part 75 is applicable, except for the provisions in 34 CFR 75.100, 75.101(b), 75.102, 75.103, 75.105, 75.109(a), 75.200, 75.201, 75.209, 75.210, 75.211, 75.217, 75.219, 75.220, 75.221, 75.222, and 75.230.

22. REFERENCES

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